

CLAIMS

What is claimed is:

1.A catheter deployment device comprising a means for deploying a deployable device and a catheter body having a delivery sheath portion and a tube portion, the outer diameter of the delivery sheath portion is larger than the outer diameter of the tube portion.

2.A catheter deployment device comprising a catheter body, a plunger, and a deployable device, the catheter body has a delivery sheath portion and a tube portion, the outer diameter of the delivery sheath portion is larger than the outer diameter of the tube portion, the plunger has delivery sheath portion and a tube portion, the plunger is slidably disposed within the catheter body, the delivery sheath portion of the plunger is disposed within the delivery sheath portion of the catheter body, the deployable device is disposed within the delivery sheath portion of the catheter body.

3.A catheter deployment device comprising a catheter body, a plunger, a deployable device, a tip, and an inner tube, the

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catheter body, deployable device, inner tube, and the tip each have proximal and distal ends and are coaxial, the proximal end of the tip is attached to the distal end of the inner tube, the catheter body has a delivery sheath portion and a tube portion, the diameter of the delivery sheath portion is larger than the diameter of the tube portion, the plunger has delivery sheath portion and a tube portion, the plunger is slidably disposed within the catheter body, the delivery sheath portion of the plunger is disposed within the delivery sheath portion of the catheter body, the deployable device is disposed within the delivery sheath portion of the catheter body, the plunger, tip, deployable device, and catheter body are all disposed about the inner tube.

4.A method for using a catheter for inserting a deployable device within a bodily lumen wherein the catheter comprises a means for deploying the deployable device and a catheter body having a delivery sheath portion and a tube portion, the diameter of the delivery sheath portion is larger than the diameter of the tube portion, comprising the steps of:

- a) advancing a guide wire into the lumen;
- b) advancing the delivery sheath portion of the catheter into the

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bodily lumen;

c) disposing an introducer sheath about the tube portion of the catheter;

d) inserting a distal end of the introducer sheath into the bodily lumen;

e) advancing the catheter further into the bodily lumen;

f) deploying the deployable body;

g) retracting the catheter until a proximal end of the delivery sheath portion of the catheter body contacts a distal end of the introducer sheath;

h) removing the introducer sheath; and

i) removing the catheter.

5.A method for using a catheter for inserting a deployable device within a bodily lumen wherein the catheter comprises a catheter body, a plunger, a deployable device, a tip, and an inner tube,

the catheter body, deployable device, inner tube, and the tip each have proximal and distal ends and are coaxial, the proximal end of the tip is attached to the distal end of the inner tube, the catheter body has a delivery sheath portion and a tube portion, the diameter of the delivery sheath portion is larger than the diameter of the tube portion, the plunger has delivery sheath

portion and a tube portion, the plunger is slidably disposed within the catheter body, the delivery sheath portion of the plunger is disposed within the delivery sheath portion of the catheter body, the deployable device is disposed within the delivery sheath portion of the catheter body, the plunger, tip, deployable device, and catheter body are all disposed about the inner tube, comprising the steps of:

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a) advancing a guide wire into the lumen;

b) advancing the delivery sheath portion of the catheter into the bodily lumen;

c) disposing an introducer sheath about the tube portion of the catheter;

d) inserting a distal end of the introducer sheath into the bodily lumen;

e) advancing the catheter further into the bodily lumen;

f) exposing the deployable device to blood by holding the plunger and retracting the catheter body;

g) retracting the catheter until a proximal end of the delivery sheath portion of the catheter body contacts a distal end of the introducer sheath;

h) removing the introducer sheath; and

i) removing the catheter.